

**IN THE CLAIMS:**

Please amend the claims as follows. This listing of the claims will replace all prior versions, and listings, of claims in the application:

Claims 1-14 (Canceled)

15. (Currently Amended) A method for determining ~~the a~~ position of ~~the a~~ rotor in an electric motor comprising the following acts:

detecting ~~the times~~ when the rotor passes through a reference position;  
adapting ~~the a~~ period of a tunable oscillator so that passages of the rotor  
through the reference position ~~passages~~ occur at a predetermined phase of the oscillator;  
and

deriving ~~the a~~ rotor position between the reference position passages from  
the oscillation of the oscillator, wherein ~~the a~~ time duration between two reference  
position passages is measured and a time is derived from this time duration, is the derived  
time being predetermined as the period of the oscillator, and that wherein the rotor has n  
pole pairs and the reference position in each corresponds to ~~the~~ passage of a pole of each  
pole pair at a detector and that wherein the derivation of the time predefined as the period  
of the oscillator comprises a step an act of averaging over time durations determined from  
respectively n successive reference position passages.

16. (Currently Amended) The method according to claim 15, wherein on each  
passage of the rotor through the reference position, the phase of the oscillator is detected  
and the tuning frequency of the oscillator is corrected using the detected deviation phase.

17. (Currently Amended) The method according to claim 15, wherein for each passage of the rotor through the reference position, the time which has elapsed since the previous passage is determined, the difference between this the elapsed time duration and a time duration determined for the previous passage is calculated and the time derived as the oscillator period is corrected by adding hereto thereto the difference weighted by a positive factor.

18. (Previously Presented) The method according to claim 17, wherein the factor is between 0.3 and 0.7.

19. (Currently Amended) The method according to claim 15, wherein the a time profile of supply voltages applied to the a plurality of phases of the motor is controlled using the derived rotor position.

20. (Currently Amended) The method according to claim 19, wherein the supply voltages are controlled according to a pattern consisting of a sequence of discrete states, which are repeated cyclically with the a detected period, where wherein switching from one of the states to the next takes place in each case at a predefined rotor position.

21. (Currently Amended) The method according to claim 15, wherein it is used on a the motor is of a household appliance, especially a washing machine.

22. (Currently Amended) A device for determining the a rotor position in an electric motor, comprising a detector disposed on the electric motor which is sensitive to the passage of the rotor through a reference position, and a phase-locking loop which can be synchronized to the an output signal of the detector, which delivers an output signal representative for of the position of the rotor, wherein the phase-locking loop comprises a tunable oscillator, a phase comparator for delivering a correction signal representative for of a phase difference between an output signal of the detector and an output signal of the

tunable oscillator, a low-pass filter for the correction signal, a time-measuring circuit for determining a period duration between two passages of the rotor through the reference position and a superposition circuit for superposing an output signal of the time-measuring circuit representative of the determined period duration and the low-pass-filtered correction signal to produce a tuning signal for the oscillator, and that wherein the time-measuring circuit comprises an average value circuit for forming the an average of the time intervals between n successive passage passages of the rotor through the reference position.

23. (Previously Presented) The device according to claim 22, wherein the detector is arranged in the magnetic field of the rotor.

24. (Currently Amended) The device according to claim 22, wherein the time-measuring circuit determines the time which has elapsed since the previous passage for each passage of the rotor through the reference position, calculates the difference between this the elapsed time duration and a time duration determined for the previous passage and corrects the a time derived as the oscillator period by adding hereto thereto the difference weighted by a positive factor.